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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/666,156	09/19/2000	Haruko Inoue	0819-425	9764

7590

06/03/2003

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EXAMINER

LOKE, STEVEN HO YIN

ART UNIT

PAPER NUMBER

2811

DATE MAILED: 06/03/2003

14

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/666,156

Applicant(s)

INOUE ET AL.

Examiner

Steven Loke

Art Unit

2811

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5 and 8-14 is/are pending in the application.
- 4a) Of the above claim(s) 8-11 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5 and 13 is/are allowed.
- 6) ☒ Claim(s) 12 and 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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1. The abstract of the disclosure is objected to because the abstract is not directed to the claimed inventions. The claimed inventions are directed to a first embodiment showing the source/drain offset regions have different dopant concentrations and a second embodiment showing different overlapping lengths between the source offset region and the source well offset region, and between the drain offset region and the drain well offset region. Correction is required. See MPEP § 608.01(b).

2. Claims 12 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 12, lines 1-4, the phrase "a dopant concentration of a source offset region is set lower than a dopant concentration of a drain offset region such that the following inequality is not easily satisfied: $VW - (a \text{ forward biased breakdown voltage of silicon}) > VS$ " is unclear whether the dopant concentration of the source offset region and the dopant concentration of the drain offset region would satisfy the inequality ($VW - (a \text{ forward biased breakdown voltage of silicon}) > VS$) or not. The word "easily" may mean the dopant concentration of a source offset region is set lower than a dopant concentration of a drain offset region such that the inequality ($VW - (a \text{ forward biased breakdown voltage of silicon}) > VS$) is satisfied.

Claim 14, lines 1-5, the phrase "a length of a region overlapping between a source offset region and a source well offset region is set smaller than a length of a region overlapping between a drain offset region and a drain well offset region such that the following inequality is not easily satisfied: $VW - (a \text{ forward biased breakdown voltage of$

silicon) $> V_S$ " is unclear whether the length of a region overlapping between the source offset region and the source offset well region and the length of the region overlapping between the drain offset region and the drain well offset region would satisfy the inequality $(V_W - (a \text{ forward biased breakdown voltage of silicon}) > V_S)$ or not. The word "easily" may mean the length of a region overlapping between a source offset region and a source well offset region is set smaller than a length of a region overlapping between a drain offset region and a drain well offset region such that the inequality $(V_W - (a \text{ forward biased breakdown voltage of silicon}) > V_S)$ is satisfied.

3. Claims 5 and 13 are allowed.
4. Claims 12 and 14 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.
5. The following is a statement of reasons for the indication of allowable subject matter: The first major difference in the claims not found in the prior art of record is a dopant concentration of a source offset region is set lower than a dopant concentration of a drain offset region. The second major difference in the claims not found in the prior art of record is a length of a region overlapping between a source offset region and a source well offset region is set smaller than a length of a region overlapping between a drain offset region and a drain well offset region. The above structures can increase the sustaining breakdown voltage of the device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Loke whose telephone number is (703) 308-4920. The examiner can normally be reached on 7:50 am to 5:20 pm.

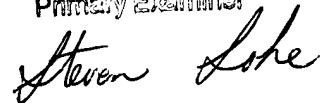
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Thomas can be reached on (703) 308-2772. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

sl
June 1, 2003

Steven Loke
Primary Examiner

A handwritten signature in black ink that reads "Steven Loke". The signature is written in a cursive style with a large, stylized "S" and "L".